



*NATIONAL ASSOCIATION OF FLOOD AND STORMWATER MANAGEMENT AGENCIES*

1301 K Street, NW • 8th Floor East • Washington, DC 20005

Telephone (202) 218-4133 • Facsimile (202) 478-1734

Testimony of the National Association of Flood  
And Stormwater Management Agencies

Presented by Peter Rabbon, P.E.  
Principal Engineer  
California Department of Water Resources  
President, NAFSMA

National Levee Safety Program Act

U.S. House of Representatives  
Transportation and Infrastructure Committee

Water Resources and Environment Subcommittee  
Rep. John Duncan, Chairman

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I am very pleased to present this testimony on approaches to enhancing the Safety of levees in the United States on behalf of the National Association of Flood and Stormwater Management Agencies (NAFSMA).

### **Background on NAFSMA**

NAFSMA is a national organization based in the nation's capital that represents more than 100 local and state flood and stormwater management agencies. Its members provide flood or storm water management to more than 76 million citizens. As a result, we have a strong interest in the issues the committee is discussing today.

The mission of the Association is to advocate public policy and encourage technologies in watershed management that focus on issues relating to flood protection, stormwater and floodplain management in order to enhance the ability of its members to protect lives, property, and economic activity from the adverse impacts of storm and flood waters. Many of NAFSMA's members are currently non-federal partners with the U.S. Army Corps of Engineers in water resources projects, including flood management and environmental restoration projects.

Formed in 1979, NAFSMA works closely with the Corps, as well as the Federal Emergency Management Agency and the U.S. Environmental Protection Agency to carry out its mission. NAFSMA members are on the front line protecting their communities from loss of life and property. Therefore, the organization is keenly aware that flood management is a wise and necessary investment required first to prevent loss of life and ensure the safety of our citizens and secondly, to prevent damages to peoples' homes and businesses and protect them from economic disruption. Flood management has proven to be a wise investment that pays for itself by preserving life and property, thereby reducing the probability of repeat requests for federal disaster assistance.

We appreciate the committee's interest in these critical issues and look forward to working with you to develop a wise and sustainable approach to protecting our citizens from the risk of flooding. We appreciate the committee's interest in safeguarding our citizens by adopting a national levee safety program.

The last six months have been devastating for the nation's Gulf Coast region and our members have discussed a number of approaches outlined below that we hope will be considered by Congress as it moves forward in response to the destruction and loss of life that occurred as a result of this year's devastating hurricanes and resulting floods and as you look at the critical questions of assessing risks to the nation from such massive flooding events. In my role as NAFSMA President, I was recently in New Orleans and witnessed the wide magnitude of the devastation caused by Hurricanes Katrina and Rita. As a resident of Sacramento who lives behind a levee, as past General Manager of the Reclamation Board of California, one of the first nonfederal flood control partners with the Corps of Engineers and as an employee of the State of California's Department of Water Resources, I am acutely aware of the need to assess and respond to needed improvements to our levee protection systems. In fact, the Governor declared a state of emergency on February 24, 2006 for the state's levee system.

NAFSMA is encouraged that the President's budget proposal includes funding for a national levee inventory initiative and we look forward to working with you and the Administration to implement this much-needed initiative.

We greatly appreciate the efforts by the committee to craft and introduce the National Levee Safety Act of 2005 and offer the following perspectives and recommendations that we hope will help to develop a solid and implementable program to address this aging infrastructure need across the nation.

### **National Inventory as a Necessary First Step**

As we move forward with this legislative initiative it is important to first identify the areas currently protected by levees. At this point, there is no national inventory or database of levees and other flood control systems throughout the country. Identifying the universe of these protection systems across the country is a critical and mandatory first step toward assessing their condition and capacity and to identify what resources may be needed to deal with our existing and aging flood protection systems.

We would define these flood protection systems in the following three Categories:

Federally-Built and Operated Flood Management Systems  
Federally-Built and Locally-Maintained Flood Management Systems  
Locally-Built and Locally-Maintained Systems

It is the first category of federally-built and federally-maintained categories where the most information is readily available. This information could prove useful for not only the levees included in this group, but also to present some background on the potential state of other similarly aged and designed levees throughout the country.

In this second category of federally-built and locally-maintained levees, design and construction information is generally available as well as information on the contacts for maintaining these levees.

In this third category of locally-built and locally-maintained levees, we are expecting that additional outreach from the state or regional levels, potentially from the Corps of Engineers District Offices, will be needed to identify where all or even most of these systems exist. There also exists a fourth category that includes privately-built and privately-maintained systems. While this category may house far fewer systems, the impacts to the public could be as devastating as publicly-maintained systems.

The development of this database of all levee and structural flood control projects is desperately needed. At this point, there is no national database that exists to alert federal and local officials where potential problems may develop across the nation. While we have sophisticated weather monitoring systems that can predict a storm's path and its level of intensity, we simply don't have the data we need to accurately predict how our nation's flood management systems can respond to these threats. We need a levee database that identifies not only federally-owned and operated levees, but local levees and other flood control structures as well. Many of our communities, both large and small, depend on levees and other structural systems for flood protection that have been built solely by the locality or state and these structures are aging and are potentially in need of repair.

NAFSMA strongly supports the creation of a national levee inventory administered at the federal level, but developed with the input of local, state

and regional officials so that it can be structured in a way to best provide the information needed at all levels of government.

### **Assessing Levee Condition and Capacity**

The next logical step in a Levee safety program is the assessment of levee condition and capacity. We need to distinguish between the inspections currently performed to verify maintenance of a levee and an engineering assessment of capacity and stability of a levee needed to verify expected performance. Absent an assessment, risks to the public cannot be understood. A levee can be perfectly well-maintained, yet still not provide the same performance as originally designed due to a variety of factors, including changed hydrologic and hydraulic conditions, unseen geotechnical problems or simply old design criteria.

### **Other Federal Agencies and Programs Need to be Linked**

Working closely in recent years with the Federal Emergency Management Agency to develop and implement the agency's Map Modernization Initiative, it has become clear that a natural partnership exists between the FEMA Map Modernization Program and the Corps flood control mission. As a result of these efforts, it has become clear that a national inventory initiative is needed and that both agencies need to have a role in the program. NAFSMA strongly supports HR 4650's call for a national levee/flood management structure inventory to be initiated and maintained by the Corps of Engineers, but we believe that the FEMA map modernization program needs to be linked with this program.

As FEMA continues to move forward to upgrade the nation's flood maps, it is clear that the need to address levees and their impacts on the floodplains and localities mapped under this initiative must be linked. Much information can be gained through FEMA's map modernization initiative to populate a needed levee inventory database and results from levee assessments are needed to accurately update floodplain maps.

NAFSMA and the Association of State Floodplain Managers have worked with both the Corps and FEMA in recent months to identify the areas where partnerships between the agencies in the flood management area are possible and necessary to ensure our citizens are adequately protected from the risks

associated with flooding. These partnerships can make all levels of government more effective and efficient at protecting the public from floods.

### **Establishment of Levee Safety Program**

While NAFSMA agrees that national levee safety program is needed, it is important to note that such a program does not currently exist at the state level. HR 4650 seems to imply that states are already tasked with this charge and that levee safety agencies and programs exist at the state level. Since many of these projects are maintained at the local or regional levels, states have not been charged with responsibility for such a program.

Due to the way that Corps projects are structured, in most cases the nonfederal sponsor is a local agency that, at least since 1986, has cost shared part of the project. These local governments have taken on the responsibility for these projects including maintenance as defined in the operations and maintenance manual provided to non-federal sponsors upon transfer of the project.

For projects not federally authorized through the Corps a federal linkage generally does not exist and knowledge of the levee may only be housed at a local or special district level. Presently, there appear to be no clear lines of regulatory authority that would require locally constructed levees to be part of a state regulated program. For states, or regional entities, to establish and assume some type of safety or regulatory program, resources and incentives need to be provided.

### **Adequate Funding Is Critical**

The \$10 million per year in funding requested under HR 4650 is much too low to undertake a national inventory and assessment program, much less to address the next steps of repair or other additional work that will be identified in this effort. As the flooding in the Gulf has shown us, we do need to make a significant investment to avoid loss of life from levee overtopping or failures in the future.

In California we are planning to spend \$2.5 million over a period of five years to develop a levee data base system that can be used for Corps, FEMA, State, and local purposes. This funding will also allow us to identify all the levees within the State and populate the data base with available data. To

date we have found over 12,000 miles of terrain that can be classified as levees of which only 2000 miles are federally authorized.

### **Local and Regional Involvement in National Levee Safety Is Critical**

As outlined under HR 4650, the National Levee Safety Review Board is composed of 10 members, none of which are local or regional representatives, the levels of government where much of the responsibility for operating and maintaining flood control projects exists. The bill instead calls for four representatives of State levee safety agencies to be involved, entities which at this point do not exist.

NAFSMA urges that representatives from local governments and regional flood control districts be included on a National Levee Safety Review Board if it is created.

### **Re-Examination of our Prioritization for Funding Flood Control Projects**

In closing, we very much appreciate the committee's efforts to draft this levee safety bill and look forward to working with you on the details of such an initiative. We do, however, want to stress that in the past few years, more and more emphasis has been placed on achieving the best economic value for federal involvement in flood management projects. We ask that the Principles and Guidelines for Corps of Engineers flood management projects be reviewed with an eye toward protecting lives and public safety first. We need to dedicate federal resources to the critical issues of first defining and making citizens aware of the risks associated with living in flood-prone areas.

While our members are committed, as you are at the federal level, to ensuring that the taxpayer receives the best possible reward for dollars spent on flood management, we also feel that we need to assess the risk faced by some of the nation's urban areas due to aging infrastructure issues. We are currently driven by a benefit cost analysis that does not adequately address the human risk factor in its formula. With these issues driving our allocation process for federal dollars, the nation's flood management agencies are put at a disadvantage in trying to work with the federal government to meet the nation's flood management needs.

We need to develop a resource allocation system that adequately addresses the risks to our nation's urban populations from flooding. NAFSMA is supportive of a national levee/flood control project inventory and assessment as a critical first step to addressing our nation's aging flood management infrastructure needs. Throughout the United States, densely populated urban areas have been protected by flood control infrastructure, which is now aging. Given the large number of lives at stake and the substantial fiscal consequences, there is a strong Federal interest in ensuring that measures are taken to minimize the risks to the population associated with extreme flood events.

Currently, however, public safety is not adequately accounted for in the prioritization of investments in federally-partnered flood management projects. The benefit-cost analysis that serves as the primary criteria for flood management investments at the federal level does not account for public safety. Instead, it focuses exclusively on the economic benefits of protecting properties and public infrastructure.

Let's develop a set of performance measures which encourages reduction in risk to our citizens from catastrophic flooding. Reducing these risks provides strong economic benefits. The amount of funding needed to address the damages, recovery and rebuilding efforts on the Gulf Coast should be strong evidence that this nation needs to commit more federal dollars to needed flood management efforts.

Other federal agencies, such as the Federal Emergency Management Agency, also need to have a role in such an effort. We know that the problems this country is facing as a result of aging infrastructure in the flood management area are real and that such an assessment is needed. We stand ready to assist in developing and implementing such an approach.

### **Creation of Flood Management Technical Advisory Committee**

NAFSMA strongly supports the creation of a National Technical Advisory Committee on Flood Management. Our members feel that the lead federal agencies in this effort should be the U.S. Army Corps of Engineers, the Federal Emergency Management Agency, the Natural Resources Conservation Service, and the Department of Interior's Bureau of Reclamation. Also participating in this committee should be representatives of the U.S. Environmental Protection Agency and the U.S. Geological

Survey, as well as State and local representatives with expertise in flood and stormwater management, as well as local and State emergency response officials.

We believe this could easily be accomplished within this legislation by broadening the scope of the levee safety review board and committee. We would like to see the missions of this group include a focus on the facilitation and coordination of federal policies and programs related to flood management. It would be extremely helpful if this group could develop joint policy recommendations that could be considered by the administration for future flood prevention, response and recovery planning.

### **Other Issues**

Although the following issues are outside of the purview of this Subcommittee, NAFSMA believes that they are important components of a unified national response to the recent disasters.

### **Removal of FEMA from the Department of Homeland Security**

NAFSMA would like to raise the need to move the Federal Emergency Management Agency outside of the structure of the larger Homeland Security Administration. We have been concerned that FEMA would inevitably lose its needed independent ability to mitigate against and quickly respond to natural disasters in such a large agency as the Department of Homeland Security. While NAFSMA strongly supports the creation and the needed work of DHS, we feel that an agency with a primary focus on natural disasters is needed.

### **Continue Adequate Funding of FEMA's Map Modernization Program**

Accurate Flood Insurance Rate Maps are an essential part of a comprehensive national floodplain management plan. To ensure that these maps are available to all levels of government as soon as possible, NAFSMA strongly supports continued adequate funding of FEMA's Map Modernization Program.

### **Mitigation Activities**

The FY03 budget for FEMA reduced the Hazard Mitigation Grant Program

(HMGP), which is used for post-disaster mitigation, from the previously authorized 15% of disaster relief funds to 7.5%, and also established a competitive pre-disaster mitigation grant program. NAFSMA believes that the HMGP authorization should be returned to 15%, and that both pre- and post-disaster mitigation should be adequately funded.

In closing, NAFSMA very much appreciates the opportunity to present our thoughts on these critical national issues to the Subcommittee for consideration. We stand ready to work with you on these important issues and would welcome any of your questions.